

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of assessing patient flow through care units of a hospital using a computer having a microprocessor comprising:
 - collecting a set of hospital data for each care unit of a hospital, the set of hospital data including:
 - _____ a set of hospital statistics, wherein the set of hospital statistics includes inventory of beds and monitored beds, average occupancy of each unit, average patient length of stay, number of health care personnel, health care personnel to patient ratio, patient acuity range, patient transports, admission sources and frequency, and discharge sources and frequency;~~a set of hospital factual information~~ and
 - _____ a set of hospital macro data, wherein the set of hospital macro data includes average number of admissions, source of admissions, frequency of admittance, average number of discharges, frequency of discharge, average overall stay in hospital, average number of emergency department visits and percentage admitted, average occupancy and length of stay, and average cost per admission;
 - assigning an hourly cost to each care unit perfor each patient including costs associated with doctor time, nurse time, staffing, drugs, IV and equipment based upon the set of collected hospital data;
 - building a model based upon the collected set of hospital data and the assigned hourly cost for each care per patient, wherein building a model includes building a multi-level model of the hospital care units, describing each unit in terms of numbers of monitored beds and other resources and average length of stay, and further describing each care unit by the percentage of patients going to other care units;

simulating the flow of patients through the hospital using the model, wherein the simulating step utilizes the collected set of hospital data for each care unit per patient by, at an admission start, describing the number of patients to be admitted per unit time and the length of time to run the model; and

~~using the model and the results of the simulating step to recommend hospital resource changes~~recommending hospital resource changes using the model and the results of the simulating step.

2. (Original) The method of Claim 1, wherein each care unit is a hospital department.
3. (Original) The method of Claim 1, further comprising using the model to estimate a cost savings that results from a purchase of patient monitoring equipment.
4. (Cancelled)
5. (Original) The method of Claim 1, further comprising identifying a bottleneck in the flow of patients through the hospital.
6. (Previously Presented) The method of Claim 1, wherein collecting data further comprises locating patients through a patient locating system.
7. (Original) The method of Claim 1, wherein collecting data is done in real-time.
8. (Original) The method of Claim 7, wherein collecting real-time data comprises using a patient locating system.
9. (Original) The method of Claim 7, wherein collecting real-time data comprises using an equipment locating system.

10. (Original) The method of Claim 7, wherein collecting real-time data comprises using an Admission Discharge Transmission System.
11. (Original) The method of Claim 7, wherein collecting real-time data comprises using a point of care system.
12. (Original) The method of Claim 1, further comprising predicting a bottleneck in the flow of patients through the hospital through the use of the model.
13. (Previously Presented) The method of Claim 1, wherein the set of collected hospital data comprises data regarding average patient length of stay in a care unit.
14. (Original) The method of Claim 1, further comprising determining alternative patient flow routes based upon optimizing efficiency of the hospital.
15. (Original) The method of Claim 1, further comprising determining resource utilization based upon the model.
16. (Currently Amended) A computer system for modeling patient flow through care units of a hospital comprising:
 - a collection module configured to accept a set of hospital data, the set of hospital data including a set of hospital statistics, wherein the set of hospital statistics includes inventory of beds and monitored beds, average occupancy of each unit, average patient length of stay, number of health care personnel, health care personnel to patient ratio, patient acuity range, patient transports, admission sources and frequency, and discharge sources and frequency, a set of hospital factual information and a set of hospital macro data wherein the set of hospital macro data includes average number of admissions,

source of admissions, frequency of admittance, average number of discharges, frequency of discharge, average overall stay in hospital, average number of emergency department visits and percentage admitted, average occupancy and length of stay, and average cost per admission;

an assignment module configured to assign an hourly cost to each unit ~~per for each~~ patient including costs associated with doctor time, nurse time, staffing, drugs, IV and equipment based upon the set of collected hospital data;

a model module configured to build a model of the flow of patients through the hospital, the model based upon the set of collected hospital data and the assigned hourly cost for each care unit per patient, wherein building a model includes building a multi-level model of the hospital care units, describing each unit in terms of numbers of monitored beds and other resources and average length of stay, and further describing each care unit by the percentage of patients going to other care units;

a simulation module configured to simulate the flow of patients through the hospital, wherein the simulation module utilizes the set of hospital data for each care unit per patient by, at an admission start, describing the number of patients to be admitted per unit time and the length of time to run the model; and

a resource module configured to determine a resource utilization of the hospital by utilizing the model and the output of the simulation module.

17. (Original) The system of Claim 16, further comprising an estimation module configured to estimate a cost savings that would result from a purchase of patient monitoring equipment.

18. (Original) The system of Claim 16, further comprising a prediction module configured to predict a bottleneck in the flow of patients.

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19. (Original) The system of Claim 16, further comprising an identification module configured to identify a bottleneck in the flow of patients.
20. (Cancelled)
21. (Original) The system of Claim 16, wherein the collection module is further configured to collect real-time hospital statistics.
22. (Original) The system of Claim 16, wherein the care units include at least the following hospital departments: Admitting, Intensive Care Unit, Surgery and Discharge.